

U.S. PATENT APPLICATION NO. 10/709,615
ATTORNEY DOCKET NO.: 24.0910**Amendments to the Claims:**

The listing of claims below replaces all previous versions of the claims in this application.

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1. (Currently Amended) A vortex tube cooling system, comprising:
a housing adapted for subsurface disposal, the housing containing:
a first ~~pressure~~ gas storage chamber;
a vortex tube coupled to the first pressure chamber;
a cooling chamber coupled to the vortex tube; and
a second ~~pressure~~ gas storage chamber coupled to the cooling chamber;
wherein the ~~pressure~~ first and second gas storage chambers are adapted to stimulate a cool fluid flow from the vortex tube into the cooling chamber.
 2. (Currently Amended) The system of claim 1, wherein the first ~~pressure~~ gas storage chamber is adapted for pressurization and the second pressure chamber is adapted for evacuation.
 3. (Currently Amended) The system of claim 1, the housing further comprising a third ~~pressure~~ gas storage chamber coupled between the first pressure chamber and the vortex tube, the third chamber adapted to sustain a predetermined fluid pressure for input to the vortex tube.
 4. (Currently Amended) The system of claim 1, the housing further comprising a heat exchanger coupled between the second ~~pressure-gas storage~~ chamber and the vortex tube, the exchanger adapted to receive hot fluid flow from the vortex tube.
 5. (Currently Amended) The system of claim 1, the housing further comprising a compressor adapted to pump a fluid from the second ~~pressure-gas storage~~ chamber into the first ~~pressure~~ gas storage chamber.
 6. (Currently Amended) The system of claim 5, the housing further comprising:
a third ~~pressure-gas storage~~ chamber coupled between the cooling chamber and the second ~~pressure-gas storage~~ chamber; and